the davit head to the waterline with the vessel in its lightest seagoing condition, with H not greater than 30 regardless of the actual lowering height.

(2) S=79+(1.2 H), where S is the lowering speed in feet per minute and H is the lowering height in feet from the davit head to the waterline with the vessel in its lightest seagoing condition, with H not greater than 99 regardless of the actual lowering height.

(i) The lowering speed for a survival craft loaded with all of its equipment must be not less than 70 percent of the speed required under paragraph (h) of this section.

(j) The lowering speed for a fully loaded survival craft must be not more than 1.3 meters per second (256 feet per minute).

(k) If a survival craft is recovered by electric power, the electrical installation, including the electric power-operated boat winch, must meet the requirements in subchapter J of this chapter. If a survival craft is recovered by any means using power, including a portable power source, safety devices must be provided that automatically cut off the power before the davit arms or falls reach the stops in order to avoid overstressing the falls or davits, unless the motor is designed to prevent such overstressing.

(l) Each launching appliance must be fitted with brakes that meet the following requirements:

(1) The brakes must be capable of stopping the descent of the survival craft or rescue boat and holding the survival craft or rescue boat securely when loaded with its full complement of persons and equipment.

(2) The brake pads must, where necessary, be protected from water and oil.

(3) Manual brakes must be arranged so that the brake is always applied unless the operator, or a mechanism activated by the operator, holds the brake control in the off position.

[CGD 84–069, 61 FR 25313, May 20, 1996, as amended at 63 FR 52819, Oct. 1, 1998]

§ 199.155 Lifeboat launching and recovery arrangements.

Lifeboat launching and recovery arrangements, in addition to meeting the requirements in §§ 199.150 and 199.153, must meet the following requirements:

(a) Each lifeboat must be provided with a launching appliance. The launching appliance must be capable of launching and recovering the lifeboat with its crew.

(b) Each launching appliance arrangement must allow the operator on the vessel to observe the lifeboat at all times during recovery.

(c) Each launching appliance arrangement must be designed to ensure persons can safely disembark from the survival craft prior to its stowage.

(d) Each lifeboat, other than a totally enclosed lifeboat, must be provided with a davit span with not less than two lifelines of sufficient length to reach the water with the vessel in its lightest seagoing condition, under unfavorable conditions of trim, and with the vessel listed up to 20 degrees either way.

§ 199.157 Free-fall lifeboat launching and recovery arrangements.

(a) The launching appliance for a free-fall lifeboat must be designed and installed so that the launching appliance and the lifeboat it serves operate as a system to protect the occupants from harmful acceleration forces and to effectively clear the vessel.

(b) The launching appliance must be designed and arranged so that, in its ready to launch position, the distance from the lowest point on the lifeboat it serves to the water surface with the vessel in its lightest seagoing condition does not exceed the lifeboat's certificated free-fall height.

(c) The launching appliance must be arranged to preclude accidental release of the lifeboat in its unattended stowed position. If the means provided to secure the lifeboat cannot be released from inside the lifeboat, the means to secure the lifeboat must be arranged to preclude boarding the lifeboat without first releasing it.

(d) Each free-fall launching arrangement must be provided with a secondary means to launch the lifeboat by falls. Such means must comply with the requirements of §§ 199.150, 199.153, and 199.155. Notwithstanding § 199.150(c), the secondary launching appliance must be capable of launching

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